

LISTING OF THE CLAIMS:

The listing of claims shown below represents the currently pending claims in this application:

Claim 1 (Currently Amended) A device for effecting the photoelectric transport of charged materials in a liquid environment, comprising:

- a photo-activatable substrate having a first face and a second face, the photo-activatable substrate capable of generating a photocurrent;
- ~~a conductor contacting at least a portion of the first face of the substrate;~~
- ~~a permeation layer supported on the second face;~~
- attachment entities coupled to the first face of the photo-activatable substrate
~~permeation layer;~~
- a liquid in contact with the first face of the photo-activatable substrate ~~permeation~~
~~layer;~~
- an electrode in contact with the liquid; and
- a light source disposed to illuminate at least a portion of the substrate, thereby to induce a current within the device.

Claim 2 (Original) The device of claim 1, wherein the substrate is adapted to generate a photo-current.

Claim 3 (Original) The device of claim 1, wherein the substrate is adapted to generate a photo electrochemical current.

Claims 4-16 (Canceled)

Claim 17 (Currently Amended) The device of claim 1, further comprising a counter
~~reference~~ electrode adapted to contact the liquid environment in contact with the device.

Claims 18-20 (Canceled)

Claim 21 (New) The device of claim 1 wherein the light source is a spatial light activation
light source.